

7. LIMITATIONS

The HIES incorporated certain limitations which one should consider when using the results. First, because the project obtained data through the use of a survey rather than a census, there was sampling error. This report examines sampling error in greater detail below, as well as various means to measure it. Second, the project contained a certain amount of *non-sampling error*. Sources of non-sampling error included survey methodology, interviewer error, processing error, and analysis error.

Various potential sources of non-sampling error existed in the 1991 HIES. For various reasons, project personnel had available less than the desired amount of time for project design, data collection, data processing, and analysis. From the standpoint of training project personnel, this time constraint meant less opportunity for training. The enumerators and staff who worked on the HIES had limited experience in survey work. However, many project personnel were teachers or had worked on the 1990 census -- providing valuable background in explaining instructions and collecting similar types of data. The time constraint also meant that the survey instruments and data entry system received less than the desired level of testing.

Selected subjects maintained diaries over a two-week period, with each week beginning on a Monday and ending on a Sunday. Senior project personnel chose this diary schedule in the hope of ameliorating the effects of weekend buying, placing the weekend at the end of the data collection period. Collecting diary information over two weeks rather than one (as used in the recent FSM survey, for example), helped to smooth irregularities and provided more data -- positive results offset in part by the additional demands placed on respondents and interviewers. Results of the diary responses indicate that the use of a two-week period was appropriate, with little evidence of interviewer or respondent fatigue.

Some potential limitations of this study relate to the use of two languages on the project. Senior personnel wrote the survey instruments and manuals for the HIES in English. But enumerators conducted most interviews in Palauan, to ensure accurate answers, though this introduced the possibility of errors in translation. Due to the use of two languages in the HIES, supervisors monitored enumerator progress to ensure the use of appropriate definitions.

Culturally, Palauans often are reluctant to disclose information and generally are wary of government agencies and new development. In an attempt to overcome these problems, the HIES recruited staff and enumerators from the areas in which they were to conduct interviews. Although no formal radio or written communications announced the survey, the project generally was well-accepted since Palauans tend to be both literate and knowledgeable about the relationship between statistical information and subsequent government funding.

Respondents estimated the value of most items not purchased with money. One consequence of this approach is that different households may have assigned different values to the same items. Although this possible inconsistency presents a potential problem for comparisons, in practice respondents tended to be quite aware of market values even when much of their consumption never passed through the market system.

Faced with constraints which included an inexperienced staff and a public traditionally reluctant to disclose information, in addition to the usual problems of logistics, timing, and financial limitations, the HIES presented an enormous challenge. Overall, the staff and enumerators tackled their tasks with enthusiasm and expertise, and the government and public strongly supported the survey. The HIES featured certain limitations and errors the HIES, as does any survey, and these should be kept in mind when examining the results. But the impressions developed during data compilation and editing, as well as during analysis, are that the survey results are highly reliable.